

CLAIMS

1. An insecticide delivery system comprising an effective amount of a non-lethal knockout agent selected from the group consisting of cis-1, 2-dichloroethylene or trans-1, 2-dichloroethylene and an effective amount of an insecticide.
2. The insecticide delivery system of claim 1 wherein the knockout agent is trans-dichloroethylene.
3. The insecticide delivery system of claim 1 wherein a diluent is provided, which diluent is one in which the knockout agent, the insecticide, or both, are at least partially soluble or at least partially miscible.
4. The insecticide delivery system of claim 3 wherein the diluent is selected from the group consisting of: a) biodegradable oils; b) alcohols; c) ketones and ketoalcohols; d) ethers; e) esters; f) polyhydric alcohols; g) lower alkyl mono- and di-ethers derived from alkylene glycols.
5. The insecticide delivery system of claim 4 wherein the diluent is selected from the group consisting of biodegradable oils, alcohols, and water.
6. The insecticide delivery system of claim 5 wherein the diluent is water.
10. The insecticide delivery system of claim 1 wherein the insecticide is selected from the group consisting of: a) organochlorines, b) organophosphates, c) organosulfurs, d) carbamates, e) dinitrophenols, f) organotins, g) pyrethroids, h) nicotinoids, i) spinosyns, j) fiproles, k) pyrroles, l) pyrazoles, m) phridazinones, n) quinazolines, o) benzoylureas, p) botanicals, q) synergists, r) antibiotics, s) fumigants, t) fluorides, and u) derivatives of pyrethrins.
11. The insecticide delivery system of claim 10 wherein the insecticide is a botanical.
12. The insecticide delivery system of claim 11 wherein the botanical is selected from the group consisting of pyrethrum, nicotine, rotenone, turpentine and *d*-limonene.

13. The insecticide delivery system of claim 12 wherein the botanical is *d*-limonene.
14. The insecticide delivery system of claim 2 wherein the insecticide is *d*-limonene.
15. The insecticide delivery system of claim 1 that also includes one or more propellants.
16. The insecticide delivery system of claim 15 wherein the propellant is a non-flammable propellant.
17. The insecticide delivery system of claim 16 wherein the non-flammable propellant is a tetrafluoroethane.
18. The insecticide delivery system of claim 1 which also includes an emulsifier.
19. The insecticide delivery system of claim 18 wherein the emulsifier is selected from the group consisting of mono-, di- and tri-sorbitan esters; polyoxethylene sorbitan esters; ethoxylated nonionic emulsifiers; propoxylated nonionic emulsifiers and ethoxylated/propoxylated nonionic emulsifiers.